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ABSTRACT

In 1991, Northern Maine Technical College (NMTC) conducted a survey of 122 individuals over the age of 55 years to determine their educational interests, their preferences regarding course delivery methods, and their demographic characteristics. The survey asked respondents to state their interest in specific subjects under the categories of health and health-care; financial management skills; socializing; purposeful living; self-esteem; and employment needs. Study findings, based on a 74% response rate, included the following: (1) the average age of the respondents was 68.5 years, 88% had lived in NMTC's service area for over 10 years, 76% were high school graduates and 36% had some college education, and the major reasons for pursuing higher education were for self-enrichment and socializing; (2) the youngest respondents were interested in the largest number of courses, and the oldest interested in the fewest courses; (3) greatest interest was expressed in health and health-care related subjects, followed closely by financial management skills and socializing; (4) courses focusing on self-esteem and employment needs received the lowest interest ratings; (5) under health and health-care subjects, greatest interest was expressed in the areas of exercise, nutrition, health-care providers, and support groups; (6) under financial-management subjects, greatest interest was expressed in the areas of benefits, wills, probates, trusts, and taxes; and (7) respondents expressed a preference for 1-day workshops and mini-courses as a means for course delivery. A literature review, a 42-item bibliography, and the survey instrument are included. (PAA)

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AN ASSESSMENT OF THE LEARNING NEEDS OF MATURE ADULTS IN NORTHERN MAINE TECHNICAL COLLEGE'S SERVICE AREA

by

Norma M. McKinnon, C.A.S.

and

Ivan D. McKinnon, M.S.ed

November, 1991

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The purpose of this project was to assess the learning needs of mature adults in Northern Maine Technical College's (NMTC) service area. NMTC, a two-year college, is one of six colleges in the Maine Technical College System. Although demographic studies show that the number of individuals past mid-life constitute over twenty percent of the area's population, an assessment of the learning needs of the mature adults in NMTC's service area had never been conducted, nor did NMTC offer courses designed specifically for mature learners.

The question for this descriptive study was: In what subject areas do the mature adults in NMTC's service area have interest? The project began with a search of related ERIC documents, educational journals and texts, and a review of mature learner programs in other institutions.

A subject interest survey was given to a non-random (convenience) sample of 122 individuals over the age of fifty-five years, and living in NMTC's service area. Ninety

surveys were completed, generating a response rate of seventy-three and eight-tenths percent. Although the sample was non-random and the respondents may not be representative of the older population in the service area, the results provide some indication of the interest levels for this selected sample of older adults.

The study sought to determine the degree of interest for specific subjects under the categories of: 1) health and health-care, 2) financial management skills, 3) socializing, 4) purposeful living, 5) self-esteem, and 6) employment needs. The survey included a section on preferred method of course delivery, and demographic information including age, employment status, years lived in the area, gender, educational level, primary occupation, and reasons for pursuing further education.

The results of the survey suggested that the highest interest of the adults in the sample was in the areas of health and health-care and financial management. Demographic data showed that of the potential mature learners surveyed, eighty-seven and eight-tenths percent had lived in the area for over ten years; seventy-five and six-tenths percent were high-school graduates; thirty-two percent possessed post-secondary education; and the major reasons cited for pursuing higher education were for the purposes of self-enrichment and socializing.

It was recommended that NMTC's continuing education division organize and promote older adult classes based on

the results from this survey and that resources be allocated for systematic program development. Resources should also be targeted for marketing self-enrichment and social-investment courses to older adults in NMTC's service area. It was also recommended that NMTC consider establishing an advisory committee, represented by mature adults in NMTC's service area, to advise the dean of continuing education relative to instructional and program needs of the past mid-life cohort. Instructional personnel should be educated about the developmental stages and the educational requirements of mature learners. Instructional staff sensitive to older adults should be employed to teach this age cohort.

It was recommended that the survey form used in this study be revised to include additional topics of interest to older female adults and a repeat survey be conducted. Additionally, mature adults should be surveyed relative to the locations suitable for delivery of NMTC courses.

It was recommended that additional research related to mature learners be conducted in the areas of classroom environment, preferred educational experiences, interest in support services, learning styles, and delivery methods. Lastly, it was recommended that campus administration use this research report to raise the consciousness of NMTC employees as it relates to the educational needs and desires of mature adults surveyed in NMTC`s service area.

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Chapter 1

INTRODUCTION

Background and Significance

Northern Maine Technical College (NMTC) is one of six technical colleges in the state of Maine offering vocational and technical programs required by citizens for employment in business, industry and government within the state. NMTC's mission includes meeting the educational and human development needs of citizens in its service area. A vacuum currently exists in NMTC's educational delivery system where mature (over fifty-five years old) adults are concerned.

Demographic studies show that from 1980 to 1989 the number of individuals in Aroostook County, NMTC's primary service area, aged fifty-five years and older, increased by twenty percent. Conversely, the number of individuals between eighteen and sixty-four years of age decreased by three percent. Mature adults represent approximately twenty percent of the population in NMTC's service area, yet NMTC had never conducted an assessment of the learning needs of mature adults, nor offered courses designed specifically for mature learners.

The purpose of this study was to assess the learning interests of mature adults in NMTC's service area. The governor's commission to study the capacity of Maine's

technical colleges recently recommended that the colleges expand their continuing education departments by increasing enrollments, programs, and services (Governor's Commission, 1991). With the advent of interactive television at NMTC and the establishment of eleven outreach satellites in the past three years, it became essential to identify learners' needs so that a data base could be developed to guide NMTC's growth experience. The problem of enrollment management may well be one of the most critical issues facing NMTC in the decade ahead. Furthermore, older adults are healthier than ever before, are demanding more services, and wish to be a vital part of society. NMTC, as an instrument of society, can help make this ideal a reality by servicing the past mid-life cohort.

Research Question

This descriptive study asks the following question: In what subject areas do the mature adults in NMTC's service area have interest? The procedures used for determining the answer to this question began with a literature review.

Chapter 2

REVIEW OF THE LITERATURE

A review of related literature was conducted to determine the learning needs of mature adults and to determine what is currently being done for mature learners by educational institutions. Identifiers used in the ERIC search were older adult student, mature learner, adult education, and elderly student.

ERIC documents, educational journals and texts, and programs from other colleges suggest that there is a need for mature learner course offerings at two-year colleges. The literature review focused on why older adults are returning to school; what courses should be offered to mature students; and how mature students learn. These areas by no means are intended to exhaust those offered in the literature.

Teaching and Learning

As the older student population grows, our awareness of their unique needs and concerns is essential. Jacobs (1989:329) advises that:

> As the proportion of older students grows, it will become crucial to develop methods of instruction acknowledging and creatively unifying the varieties of experience to be found in such diverse groups.

Woolley (1973) exhorts educators to realize that the numbers of older adult students are increasing every year,

especially in two-year colleges, and teaching methods must be tailored to students' particular backgrounds, needs, and expectations. More recently Bradle (1986) notes that people between the ages of fifty-five and seventy-five (he calls them the "young-old") have different course expectations than traditional students, have learning difficulties, and require different teaching strategies.

Contrary to this thinking, Schleppegrell (1987) contends that research on adult learning shows that there is no decline in ability to learn as people get older, that except for minor considerations such as hearing and vision loss, the age of the adult learner is not a major factor in learning. Furthermore, the context in which adults learn is the major influence on their ability to learn. Contrary to popular stereotypes, older adults can be good foreign language learners. This researcher argues that the difficulties older adults often experience in the classroom can be overcome through adjustments in the learning environment, attention to affective factors, and use of effective teaching techniques and approaches.

Educators appear to agree that the educator of mature students needs to attend to the classroom environment. According to Darkenwald (1989) mature students want to be involved, to have teacher support, and to have clear and organized goals. Havinghurst (1972) says that timing is significant when considering mature adults' learning. He

contends that mature students are likely to be most open to learning at particular teachable moments in which they have become open to new world views. McWhinney (1990) believes that mature learning is a personal integration of knowledge, both experiential and conceptual.

Johnson (1989:159) discloses that "practical experiences, rather than theoretical concepts, are primarily sought by mature adult learners." He also notes that time is an important factor for mature students, most of whom attend part-time and desire credit for life experiences related to required courses.

Patterson (1987) discusses obstacles and problems that confront older hearing-impaired students in the classroom. Patterson (1987:509) believes "where their numbers are increasing, and where these impairments may detract from their receiving maximum benefit from their educational experiences, the problem must be addressed." Furthermore, Parks (1989:2) contends that:

> Alternative delivery strategies help guarantee success and opportunities to learners who do not fit the mold of the traditional student. Improving the delivery of education may require only consideration of available resources to maximize program offerings.

McWhinney (1990:14) charges that:

> We lack not only institutions for learning that focus on the issues and potentials of those past mid-life, but also an appreciation that such institutions would have different processes and content than programs developed for young adults.

One school that is doing something about their mature

learners is Los Angeles Community College. This college is experiencing an enormous increase in the number of mature adults enrolling at the college and offers a workshop entitled "Effective Strategies for Teaching Older Adults" (Parr, 1985).

The literature addressing the teaching and learning process as it relates to the mature learner is inconsistent. Some writers believe that the learning needs of older adults do not differ from the needs of younger adults; others contend that the differences are significant. The next section looks at why older adults are returning to school.

Reasons Older Students Return to School

Older adults appear to have many reasons for returning to school. Wolf (1985) describes ambitions, attitudes, personal needs, reminiscences, and the process of reengagement as reasons older adults return to school. According to Spouse (1981), many older adults are attending community colleges for reasons of cost and convenience and because of the informal climate in community college classrooms.

O'Connor (1987) examined the learning goals of older adults and found elders, more likely than middle-aged students, to consider "learning for its own sake" the most important reason elders enroll in college-level programs. Feldman and Sweeney (1989) report that the elderly population desires practical education to ensure

self-sufficiency in our complex society. Roberts (1990) emphasizes the role of vocational education in the transition to a postretirement career, noting the valuable contributions of this age cohort. Others contend that elders have a need to reorder their lives; to make sense of their life choices and experiences (Kazemek and Rigg, 1985).

The developmental stages described by Sheehy, Gould, Levinson, and Robinson place individuals aged fifty-three to sixty in the renewal verses resignation stage of development, and individuals aged sixty to sixty-five in the late adult transition stage (Sweeney, 1988). The need to reorder their life is consistent with the developmental stage of elderly individuals.

McWhinney (1990) discusses the mature learner noting that those who are making a transition into the mature stages of adulthood come to a different world view and a different set of needs than the younger adults, and accordingly have different relationships to their self concept, knowledge, and the environment than when they encountered the tertiary system at the colleges, university, and business sponsored courses. Their learning will be achieved through a different set of processes that can be characterized as: 1) integrative, 2) conscious and individualizing, 3) concerned with authenticity, 4) avoiding of stereotypes, and 5) synthetic and critical.

A study was conducted by Wolf (1983) to try to determine older adults' motivations for, and experiences in,

the educational system as well as to try to determine how their life histories were being woven into their educational experiences. Based on the work of state theorists such as Buhler and Erikson as well as on the life review concept of Robert Butler, the study focused on a group of older people (aged sixty to eighty) who were taking some form of adult education course. The researcher visited them in their homes on three occasions, each one week apart, and spent one and one-half hours on each visit tape-recording their thoughts. The interviews were somewhat structured. The first focused on the adults' motivations for pursuing education; the second was concerned with the actual experience of classroom learning; and the last interview focused on the integration of the educational experience into the world of the learners. However, the interviewer let the subjects "ramble on" in hopes of evoking life review types of thoughts. The study found that many motivations exist for older learners to take adult education courses, such as social class, thwarted educational dreams, or a wish to go to college. The classroom experiences of the older adults were diverse; many were nostalgic; most were positive.

A research review conducted by Leptak (1987), shows that the older adults who enroll in higher education are generally well educated already, in good health, and without financial problems. Older adults appear to have little

need or desire, of supportive services. In fact many intended incentives such as free tuition and the auditing option appear to be disincentives for some older adults. The amount of research on older adults in higher education is disproportionate to the number of persons who are ever likely to enroll.

As can be seen by the discussion above, there are multiple reasons given by older adults for returning to school. The next area frequently discussed in the literature involves the courses that should be offered to older adults.

Course Offerings

The literature on the field of older adults in higher education is relatively new. Since the publication of the journal of Educational Gerontology in 1985 the amount of literature in the field has increased substantially. Educators are just beginning to identify what courses older adults want to take.

According to Brand (1986) the goals for mature adult learners are: 1) To increase personal awareness of individual health maintenance; 2) To provide information on health, nutrition and exercise; 3) To acquaint people of all ages with the process of aging and the place of retirement in this society; and 4) To provide learning opportunities for older adults through community outreach.

McWhinney (1990:20) advocates a new wave of educational reform focusing on mature learners when he concludes that:

> Traditional tertiary education has trained for the crafts of industry, commerce, service, and the home. A quaternary system, a fourth way, is needed to support individuals maturing toward a new conjunction of personal and social perspectives ... the fourth way will enhance immeasurably the contribution adults will make to society in the second half of their lives.

A new wave of educational reform is occurring because many schools are doing some innovative, creative things to accommodate older students. Watkins (1989:1) observes that "higher education institutions are creating academic centers run for and by older adults, often retired professionals." Community colleges are leading the new wave of reform.

> Community colleges have long been an important route for working-class Americans who want jobs that ensure a modicum of economic security. And a broadly skilled workforce is essential for economic competitiveness and a stable democratic society (Watkins, 1989:1).

The older adult is seen as a potential worker in the nontraditional work setting. Kerschner and Ficke (1989) describe how many countries are educating the older adult to remain productive outside of the traditional work environment.

Because all students are concerned with educational costs, Ostar (1989) says that it is the responsibility of all colleges to remain affordable to older adults. In addition to keeping costs down, colleges need to offer courses suitable for older adults. A project called Resources (Retired Employees Skills Outreach Using Retirees in Continuing Employment Situations), designed to meet the employee needs of the over fifty-five age population was

developed at Middlesex County College in Edison, New Jersey (Yoselaff, 1987). Brand (1986) explains how a prenatal class taught by volunteer instructors expanded into three sections. One of those three sections is a senior education program.

Community colleges are offering older adult programs in nontraditional classroom settings such as senior centers, retirement homes, and convalescent hospitals. The De Anza Community College's older adult services program takes courses to approximately nine convalescent hospitals and senior day-care centers (Nielsen and Geyer, 1986).

Pittsburg University offers a child-care program to older adults. Newman (1989:2) notes that "the training model was designed as part of a Job Training Partnership Act project for low-income older persons interested in working in the field of child-care." Strom and Strom (1989:64) argue that "the educational needs of grandparents have been overlooked and that a specialized curriculum is needed."

Fielo and Rizzolo (1988) describe a course for senior nursing students in providing patient education to older adults who are no longer in the hospital. Topics covered in the class include body changes as a result of aging, pharmacokinetics, and patient adherence.

Clearly the literature shows that older students require educational programming that takes into consideration such factors as age, career aspirations, and

retirement concerns. Religion also becomes a major focus in the lives of older adults. Olson (1989), Elias (1988), and Simmons (1988) all report that religious education is one area of interest to older adults. Nordstrom (1989:7) points out that "it is ironic that today's traditional student tends to hold non-traditional values, while today's non-traditional student tends to hold traditional values."

Tifft (1988) interviewed Donald Baker, Dean of the college of continuing education at Rochester Institute of Technology. One of the conclusions that can be drawn from that interview is that quality and service are not the exclusive domains of industry as they are equally as important in education.

Universities have expertise and educational ability in gerontology. If these assets were spread out to the two-year colleges, a larger rural populous would be serviced. Peters and Stunkel (1987) discuss the need for gerontological services in rural Kansas. A project called "Rural Age" was developed jointly by Kansas State University Center for Aging and a consortium of rural community colleges. Peters and Stunkel (1987:6) report that:

> The overwhelming majority of educational programs in aging have been developed in four-year schools where the orientation has held a distinct urban bias ... Community colleges are the principle providers of higher education in rural areas ... They provide an important, and sometimes sole, source of education and training for several learner groups. Community colleges ... are strategically located to respond to gerontological, educational and training requirements, and needs.

No discussion of the older generation would be complete without dispelling a few myths. Myths such as senility, incompetence, decline in intelligence, learning inability, and rigidity are all refuted by research (Shaw, 1989). Additionally, older adults do not resist computer technology. Ansley and Erber (1988) found that results do not support the stereotype of the older adult as resistant to computer technology or as experiencing difficulty in using this technology. Older adults are using computers to form networks. Furlong (1989) describes the on-line communications network for older adults called "Senior Net."

In summary, mature adult learning is a personal integration of knowledge, both experiential and conceptual. The quest for learning is generated internally; learners are self-directed and self-motivated. Learning moves mature adults toward integration with the environment, that is, toward individuation.

Mature adults make a different and highly valuable contribution to society, but a vacuum exists in the current educational structure for mature adults. To better understand the instructional and program needs of mature learners, an understanding of the developmental stages of mature adults is needed. Adult students appear to prefer courses related to their personal and social needs such as nutrition, retirement, financial management, and self-enrichment courses such as language and religion.

The reasons older adults return to school include an effort to reorder their lives; to reminisce; to socialize; to learn for the sake of learning; to retrain for the workforce; to become self-sufficient; to fulfill personal needs; and to make a contribution to society.

It can be concluded that the older adult group will continue to grow in the next few years and that colleges will continue to become aware of the needs and concerns of this age cohort. As preschoolers our parents prepared us for the beginning of our educational future. While in school our teachers prepared us for our future in the workplace. While in the workplace, who is preparing us for our golden years? Is the educational system the appropriate avenue for preparing those people who are seeking to better understand their role in the golden years? The purpose of this study is to assess the course needs of older adult learners because it is believed that the two-year college is the appropriate structure for meeting the continued learning needs of the older population.

Chapter 3

PROCEDURES

The question for this descriptive study was: In what subject areas do the mature adults in NMTC's service area have interest? The project began with a computerized search of the ERIC documents and educational journals using the identifiers mature learner, older adult student, adult education, and elderly student. Additionally, mature learner programs at other two-year colleges were reviewed.

After obtaining permission from the author (Ford Craig, 1990), the survey form used in the study was modified. Demographic information and additional course options were added to the survey. The modified version of the survey was taken to the social sciences department at the University of Maine at Presque Isle where changes were said to be appropriate by three professors. Additionally, the university's statistics professor suggested minor changes to the survey. Suggestions for change were implemented and a copy of the modified survey form can be found in Appendix A.

A cover letter to accompany the survey was devised to explain the goals of the study. The majority of respondents were contacted personally by the investigators. Also, respondents filling out the survey were asked if they knew of another qualified person who might be willing to complete

a survey. Stamped addressed envelopes were provided along with the cover letter and questionnaire to individuals willing to pass the survey along to another qualified individual(s). A non-random sampling procedure was used in an effort to ensure an adequate sample size.

The Aroostook Area Agency on Aging was contacted and provided a list of senior citizen groups in NMTC's service area. All senior citizen group leaders were contacted and arrangements were made for the investigators to attend the next scheduled group meeting to explain the goals of the study and personally administer the survey. Only one of the six senior citizen groups refused to have the survey administered. The reason given by the group leader was that his "group didn't like to get involved in such things."

The evening adult education division of two of the three local high-schools in NMTC's service area provided the investigator with additional older adult candidates who completed the survey. Lastly, a local Baptist Church was contacted and leaders there permitted the investigator to administer the survey to a group of older adults. In total, the survey was given out to 122 older adults living in NMTC's service area.

Means and percentages were the descriptive statistical procedures used to analyze the data. A report of the findings, including recommendations for course offerings, was provided to NMTC's administration.

Definitions

In this study, as in the literature, the terms mature students, mature learners, potential mature students, older adults, and older students, were used synonymously. The mature adult is defined as an individual aged fifty-five years or older. A mini-course can be defined as a course offered over a shorter period of time than a traditional academic course, for example, the class may meet two nights per week for three weeks.

Assumptions

An assumption was made that any of the six survey topics receiving a favorable response of thirty percent or greater indicated a high level of interest. A favorable response of twenty percent or greater indicated a moderate level of interest. It was also assumed that older learners marking "interested" and "very interested" on a particular survey topic could be viewed as a potential NMTC student.

Limitations

One of the limitations of this study was that the recommendations made were unique to the older adults in NMTC's service area who completed the survey, therefore the findings are limited for use at NMTC. Additionally, because the investigators chose particular groups of elders for participation in the study, such as those in senior citizen groups and adult education classes, findings cannot be generalized.

Chapter 4

RESULTS

An interest inventory was administered to 122 older adults. One hundred and twelve surveys were administered to older adults by the investigator. Of this number, eight-six elders completed the survey. Additionally, ten questionnaires, accompanied by self-addressed envelopes and cover letters, were administered by survey respondents to other older adults they believed would be willing to complete the survey. Four of the ten surveys were returned to the investigators, providing a total respondent group of ninety, generating a response rate of seventy-three and eight-tenths percent. Five senior citizen groups, one church group, two high-school adult education groups from two of the three cities in NMTC's service area, and four unknown elders represented the resultant group of ninety respondents.

The investigators asked respondents if they were fifty-five years of age or older and lived in NMTC's service area in order to determine eligibility. The goals of the study were explained, as well as what participation would involve. Confidentiality was assured. Oral consent was obtained. Written material in large type that reinforced the explanation of the study and provided information as to how to contact the researchers was left with respondents.

In responding to those who decided not to complete the survey, the investigators verbally reinforced the elder's right to refuse. A non-random sampling procedure was used to ensure that an adequate sample size would result. The results generated by the study were not intended for use outside of NMTC.

Demographic information is presented in Table 1. Two columns are reported for each category of demographic information. The first column presents the total number of older adults surveyed who chose a particular response within a category and the second column presents the percentage of older adults surveyed (n=90) who chose a particular response within a category.

As can be seen in Table 1, sixty-seven and eight-tenths percent (sixty-one) of respondents were female, and thirty-two and two-tenths percent (twenty-nine) were male. Twenty respondents were between the age of fifty-five and fifty-nine years old; fourteen respondents were between the age of sixty and sixty-four years old; twelve respondents were between the age of sixty-five and sixty-nine years old; sixteen respondents were between the age of seventy and seventy-four years old; nineteen respondents were between the age of seventy-five and seventy-nine years old; and nine respondents were eighty years of age or older.

Table 1
Number and Percentage of Older Adults
Responding to a Given Category
of Demographic Information

Category		Older Adults No.	%
1. Gender:			
Female		61	67.8
Male		29	32.2
	Total	90	100.0
2. Age:			
55-59		20	22.2
60-64		14	15.6
65-69		12	13.3
70-74		16	17.8
75-79		19	21.1
80+		09	10.0
	Total	90	100.0
3. Amount of time lived in the area:			
Lived in area for more than 10 yrs.		79	87.8
Lived in area between 5-10 yrs.		3	3.3
Lived in area between 1-5 yrs.		3	3.3
Lived in area between 0-1 yr.		2	2.2
Those who did not respond		3	3.3
	Total	90	99.9
4. Number of enenings per week involved in outside activities (on the average):			
0 evenings per week		23	25.6
1 evening per week		17	18.9
2 evenings per week		27	30.0
3 evenings per week		14	15.6
4 or more evenings per week		4	4.4
Those who did not respond		5	5.6
	Total	90	100.1
5. Educational preparation:			
0-8 years		10	11.1
8-12 years		8	8.9

Table 1 (Cont.)

Category			Older Adults No.	%
Graduated 12th grade			36	40.0
"Some college"			18	20.0
College degree/s			14	15.6
Those who did not respond			4	4.4
		Total	90	100.0
6. Retired:				
Retired			70	77.8
Not retired			20	22.2
		Total	90	100.0
7. Work status:				
Blue collar			49	54.4
White collar			24	26.7
Those who did not respond			17	18.9
		Total	90	100.0
Employed currently			63	70.0
(part-time)		(37)		(58.7)
(full-time)		(26)		(41.3)
	Sub Total	(63)		(100.0)
Not employed			27	30.0
		Total	90	100.0
8. Reasons for continuing education:				
Self-enrichment			61	67.8
Meeting new people			30	33.3
Upgrading present skills			19	21.1
Earning a degree, diploma, or certificate			2	2.2
Preparation of a new career			0	0.0
9. Response to the question: Are you aware that NMTC offers the use of its facilities to qualified companies/organizations for meetings, workshops, seminars, etc. at no cost?				
Those who were aware			39	43.3
Those who were not aware			51	56.7
		Total	90	100.0

The number of years older adults had lived in the area (NMTC's service area) varied from eighty-seven and eight-tenths percent, or seventy-nine respondents living in the area for more than ten years to two-hundreds and two-tenths percent, or two respondents, living in the area between zero and one year. The number of evenings per week that older adults reported being involved in outside activities varied from zero evenings reported by twenty-five and six tenths percent of respondents, or twenty-three people, to four or more evenings reported by four and four-tenths percent, or four people.

The educational preparation reported by respondents varied from eleven and one-tenth percent, or ten people, reporting zero to eight years of education, to fifteen and six-tenths percent, or fourteen people, reporting college degrees. Of the ninety respondents, seventy-seven and eight-tenths percent, or seventy people, were retired and twenty-two and two-tenths percent, or twenty people, were not retired.

The work status reported by respondents can be broken down as follows: Fifty-four and four-tenths percent, or forty-nine people were blue collar; twenty-six and seven-tenths percent, or twenty-four people were white collar; and, eighteen and nine-tenths percent, or seventeen people did not respond. Of the ninety respondents, seventy and zero percent, or sixty-three people were currently

employed, and thirty and zero percent, or twenty-seven people, were not currently employed.

The reasons older adults gave for wanting to continue their education varied as follows: Sixty-seven and eight-tenths percent, or sixty-one people, reported self-enrichment; thirty-three and three-tenths percent, or thirty people, reported meeting new people; twenty-one and one-tenth percent, or nineteen people, reported upgrading present skills; two-hundreds and two-tenths percent, or two people, reported earning a degree, diploma, or certificate; and zero percent, or no people, reported preparation for a new career.

Fifty-six and seven-tenths percent, or fifty-one people, reported they were not aware, and forty-three and three-tenths percent, or thirty-nine people, reported they were aware that NMTC offers its facilities free of charge to qualified companies/organizations for meetings, workshops, and seminars at no cost. The number of subjects respondents were interested in varied according to age cohort.

The fifty-five to fifty-nine age cohort was interested in sixteen and seven-tenths subjects; the sixty to sixty-four age cohort was interested in fourteen and three-tenths subjects; the sixty-five to sixty-nine age cohort was interested in twelve and three-tenths subjects; the seventy to seventy-four age cohort was interested in nine and seven-tenths subjects; the seventy-five to

seventy-nine age cohort was interested in seven and seven-tenths subjects; and the eighty and older age cohort was interested in three and one-tenth subjects. As can be seen in Table 2, the younger the age group, the more subjects of interest to the group.

Table 2

Number of Subjects Selected by Age Group and by Individual

Very interested and interested*	Age Group 55-59 n=20	60-64 n=14	65-69 n=12	70-74 n=16	75-79 n=19	80+ n=9
1. No. of subjects per group	334	200	147	155	147	28
2. No. of subjects per individual	16.7	14.3	12.3	9.7	7.7	3.1

* Combination of "very interested" and "interested"

From the six survey areas of financial management skills, employment needs, health and health-care, socializing, self-esteem, and purposeful living, a rank ordered list was devised by averaging the total number of subjects that respondents were interested in, or very interested in, divided by the number of subject choices for that area, then divided by ninety to obtain the percentage of interest in the area. For example, in the health and health-care area, a total of 271 favorable responses were

given by respondents. The ten subjects in the health and health-care area were divided into the total number of favorable responses (271) giving a value of twenty-seven and one-tenth affirmative responses for health-care. That value was divided by ninety (number of respondents) giving a thirty and one-tenth percent response rate. A significant (high) response rate was considered to be thirty percent or greater, therefore, it was concluded that the greatest interest was in the topic of health and health-care and the second greatest area of interest was in the topic of financial management skills , generating a twenty-eight and eight-tenths response rate. The rank-ordered list is presented in Table 3.

Table 3

Number and Percentage of Responses to Six Major Topic Areas

Topic	Affirmative responses	Subjects per topic	Responses per subject No.	Responses n=90 %
1. Health-care	271	10	27.1	30.1
2. Financial management	207	8	25.9	28.8
3. Socializing	156	7	22.3	24.8
4. Purposeful living	249	12	20.8	23.1
5. Self-esteem	79	5	15.8	17.6
6. Employment needs	48	6	8.0	8.9

This list suggests that the areas older adults were most interested in were health and finance, whereas the area of least interest was in employment needs.

Tables four through nine represent the results of the survey of the six topical areas. The total percentage of the "interested" and "very interested" responses were combined and reported according to the age groups 55-64 and 65-80+ to allow for comparison of responses by age cohort. The actual number of older adults marking "very interested" or "interested" on the questionnaire is to the left of the column representing the percentage of total responses to subject areas. Additionally, the actual number of older adults responding positively to the subject area is in a column to the left of the percentage of responses according to age group. The latter information is presented in an effort to compare the level of interest respondents had in a particular subject according to age group.

Table 4 concerns respondents' interest in the area of health and health-care. Results suggest that potential mature learners have a high interest in subjects related to the health and health-care area. The specific subjects of interest were exercise, nutrition, health-care providers, and support groups. To a lesser degree, elders were interested in the areas of counseling services, coping with living alone, cooking for one, mental health, and coping with alzheimers. The subjects of interest by age

group varied little; the two areas showing the greatest difference being exercise and nutrition.

Table 4

Percentage of Total Responses and Percentage of Age Group Responses to Health and Health-Care

Subject	Very Interested No.	% n=90	Interested No.	% n=90	Age Group * 55-64 No.	% n=34	65-80+ No.	% n=56
1. Exercise	10	11.1	29	32.2	19	55.9	20	35.7
2. Nutrition	6	6.7	30	33.3	19	55.9	17	30.4
3. Mental health education	4	4.4	16	17.8	11	32.4	9	16.1
4. Alzheimers	2	2.2	17	18.9	9	26.5	10	17.9
5. Medication education	5	5.6	21	23.3	12	35.3	14	25.0
6. Care providers	5	5.6	24	26.7	15	44.1	14	25.0
7. Living alone	3	3.3	21	23.3	11	32.4	13	23.2
8. Support groups	4	4.4	25	27.8	14	41.2	15	26.8
9. Counseling services	4	4.4	21	23.3	10	29.4	15	26.8
10. Cooking for one	8	8.9	16	17.8	7	20.6	17	30.4
Total	51		220		127		144	

* Combined "interested" and "very interested" by age group.

The findings in Table 5 suggest that the mature adults in NMTC's service area have a moderate interest in taking

3.

courses in the financial management skills area. The specific subjects of benefits, wills, and trusts, and taxes were the subjects of most interest to the mature adults surveyed. The two response areas that varied most according to age group were benefits and financial planning.

Table 5

Percentage of Total Responses and Percentage of Age Group Responses to Financial Management Skills

Subject	Very Interested		Interested		Age Group * 55-64		65-80+	
	No.	% n=90	No.	% n=90	No.	% n=34	No.	% n=56
1. Benefits	9	10.0	23	25.6	18	52.9	14	25.0
2. Wills, Trusts	5	5.6	26	28.9	15	44.1	16	28.6
3. Taxes	5	5.6	23	25.6	15	44.1	13	23.2
4. Legal help	3	3.3	23	25.6	9	26.5	17	30.4
5. Financial plan	7	7.8	16	17.8	14	41.2	9	16.1
6. Money management	7	7.8	13	14.4	11	32.4	9	16.1
7. Housing choice	8	8.9	18	20.0	11	32.4	15	26.8
8. Consumer problems	7	7.8	15	16.7	12	35.3	10	17.9
Total	51		157		105		103	

* Combined "interested" and "very interested" by age group.

Table 6 is indicative of the responses by the elders sampled to the area of socializing. Overall, elders did not indicate a high interest in the socializing area. The overall percentage of positive response was twenty-four and eight-tenths percent. However the specific area of trips showed a forty-seven and eight-tenths percent favorable response (interested and very interested combined). The two areas where responses varied the most based on age group were trips and volunteer work.

Table 6

Percentage of Total Responses and Percentage of Age Group Responses to Socializing

Subject	Very Interested		Interested		Age Group * 55-64		65-80+	
	No.	% n=90	No.	% n=90	No.	% n=34	No.	% n=56
1. Trips	18	20.0	25	27.8	23	67.6	20	35.7
2. Volunteer work	6	6.7	20	22.2	15	44.1	11	19.6
3. Communication	0	0.0	21	23.3	13	38.2	8	14.3
4. Reading groups	4	4.4	11	12.2	7	20.6	8	14.3
5. Performing arts	3	3.3	11	12.2	7	20.6	7	12.5
6. Forums	5	5.6	17	18.9	13	38.2	9	16.1
7. Table-top games	4	4.4	11	12.2	7	20.6	8	14.3
Total	40		116		85		71	

* Combined "interested" and "very interested" by age group.

Table 7 represents elders' responses to the area of purposeful living. Although responses were not suggestive of high interest relative to the overall category of purposeful living, responses were favorable to the specific areas of hobbies and computer familiarity. The subjects showing the greatest response differences according to age group were hobbies and computer skills.

Table 7

Percentage of Total Responses and Percentage of Age Group Responses to Purposeful Living

Subject	Very Interested		Interested		Age Group * 55-64		65-80+	
	No.	% n=90	No.	% n=90	No.	% n=34	No.	% n=56
1. American history	10	11.1	12	13.3	13	38.2	9	16.1
2. American literature	4	4.4	13	14.4	10	29.4	7	12.5
3. World history	8	8.9	13	14.4	13	38.2	8	14.3
4. Creative writing	7	7.8	8	8.9	8	23.5	7	12.5
5. Computer	10	11.1	17	18.9	18	52.9	9	16.1
6. Painting	6	6.7	12	13.3	11	32.4	7	12.5
7. Electronic technology	2	2.2	20	22.2	12	35.3	10	17.9
8. Oral history	5	5.6	13	14.4	7	20.6	11	19.6

Table 7 (Cont.)

Subject	Very Interested		Interested		Age Group 55-64		65-80+	
	No.	% n=90	No.	% n=90	No.	% n=34	No.	% n=56
9. Folk crafts	7	7.8	19	21.1	13	38.2	13	23.2
10. Day-care provider	2	2.2	8	8.9	4	11.8	6	10.7
11. Hobbies	15	16.7	28	31.1	24	70.6	19	33.9
12. Autobiography	5	5.6	5	5.6	5	14.7	5	8.9
Total	81		168		138		111	

* Combined "interested" and "very interested" by age group.

The responses to the self-esteem category are depicted in Table 8. Responses to this category were not of high interest to the elders surveyed, however, the subject of American literature was of some interest. The two subjects that showed the greatest response difference according to age group were leadership and sociology.

Table 8

Percentage of Total Responses and Percentage of Age Group Responses to Self-Esteem

Subject	Very Interested No.	% n=90	Interested No.	% n=90	Age Group * 55-64 No.	% n=34	65-80+ No.	% n=56
1. Leadership	4	4.4	12	13.3	10	29.4	6	10.7
2. World literature	2	2.2	14	15.6	9	26.5	7	12.5
3. American literature	5	5.6	17	18.9	12	35.3	10	17.9
4. Sociology	1	1.1	13	14.4	10	29.4	4	7.1
5. Psychology	2	2.2	9	10.0	8	23.5	3	5.4
Totals	14		65		49		30	

* Combined "interested" and "very interested" by age group.

Table 9 indicates elders' responses to the employment needs (to help secure work) category. Responses to this category did not suggest high interest. In fact, employment needs was the area of least interest to mature adults surveyed. Not only did the category of employment needs receive the least favorable responses, but all subjects within this category received the least favorable responses as well. The subjects of some interest to mature adults in this category were in-home care and clerical. The only subject that showed a difference in response according to age group was clerical skills.

Table 9

Percentage of Total Responses and Percentage of Age Group Responses to Employment Needs

Subject	Very Interested		Interested		Age Group * 55-64		65-80+	
	No.	% n=90	No.	% n=90	No.	% n=34	No.	% n=56
1. Fast food industry	1	1.1	5	5.6	4	11.8	2	3.6
2. Clerical	3	3.3	11	12.2	10	29.4	4	7.1
3. Day-care services	0	0.0	4	4.4	3	8.8	1	1.8
4. In-home care	4	4.4	12	13.3	8	23.5	8	14.3
5. Custodial	0	0.0	3	3.3	2	5.9	1	1.8
6. Teacher's aide	0	0.0	5	5.6	3	8.8	2	3.6
Total	8		40		30		18	

* Combined "interested" and "very interested" by age group.

The survey also included six choices for the delivery of courses along with choices relative to dorm living or commuting. One respondent indicated an interest in living on the NMTC campus. Other than the one response indicating a desire to live on campus, twenty-two of the ninety respondents favored traveling to campus to take courses.

The remaining respondents did not respond either way. The responses to choices for course delivery method are depicted in Table 10.

Table 10

Number and Percentage of Responses to Choices for Course Delivery

Delivery Method	Affirmative Responses n=90	
	No.	%
1. One-day workshop	39	43.3
2. Mini-course	32	35.6
3. Day class	27	30.0
4. Night class	19	21.1
5. Week-end class	17	18.9
6. Traditional semester	11	12.2
7. Travel to campus	22	24.4
8. Live on campus	1	1.1

As is suggested by the data above, the potential mature learners surveyed preferred to learn in one-day workshops, followed by mini-courses and day classes. The traditional academic semester was of least interest to respondents.

In summary, the data indicated a high interest in the area of health and health-care and a moderately high interest in financial management skills. Although not areas

of high interest, socializing (specifically trips) and purposeful living (specifically hobbies) captured the highest percentage of interest. There was some difference in the type of courses desired by older adults according to age cohort. Additionally, the youngest age cohort (55-65 years) was interested in the largest number of subjects. Lastly, the course delivery method that respondents preferred most was the one-day workshop.

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Discussion

The literature suggests that mature adults are at a juncture in their lives whereby they desire to grow in the area of personal and societal perspectives (McWhinney, 1990). The findings of this study were consistent with this notion because the two areas of greatest interest to the mature adults surveyed were health and health-care and financial management. Additionally, there was a moderate amount of interest in the areas of the socializing and purposeful living.

McWhinney (1990:20) discusses the need for educational organizations to provide mature learners with a learning environment conducive to their developmental growth. He states that:

> A quaternary system, a fourth way, is needed to support individuals maturing toward a new conjunction of personal and societal perspectives-one that will provide a dialectic of action learning and rising consciousness. If seriously undertaken, the fourth way will enhance immeasurably the contribution adults will make to society in the second half of their lives.

The differences in the developmental needs and concerns of the various cohorts was interesting to note. For example, the younger cohort was interested in a greater variety of subject areas than was the older age cohort.

Additionally, there were substantial differences in specific subject areas according to age group, for example in the health and health-care area, the younger cohort was more interested in nutrition and exercise than the older group, and the older group was more interested than the younger group in the topic of cooking for one. When the lifestyles and life stressors for each age group was considered, the responses given by the two groups were to be expected. For example, the younger group was more apt to be living with a spouse and to be more active, whereas the older group was more apt to be living alone and to be less active.

In the area of financial management skills, the older group was more interested in obtaining legal help than the younger group. This was also to be expected when considering that the older group was perhaps preparing to make some major life changes such as selling a home. The older of the two age groups appeared to be much less interested in communication skills and political/civic forums which could be a result of the disengagement from society that may occur as a result of aging. According to disengagement theory, proposed by Cumming and Henry, all old people and society mutually withdraw, and the withdrawal is biologically and psychologically intrinsic and inevitable, and it is necessary for aging and beneficial to society (Murray and Zentner, 1985). Contrary to this notion, activity theory, formulated by Havinghurst, Maddox, and

Palmore, refute disengagement theory. These theorists believe that most elderly people maintain a level of activity and engagement commensurate with their earlier patterns of activity and past life-styles and the maintenance of physical, mental, and social activity is usually necessary for successful aging (Murray and Zentner, 1985).

It was interesting to note that sixty-four and five-tenths percent of the respondents spent between one and three evenings per week engaged in activities outside of the home. It was possible that the pool of older adults sampled was not representative of all older adults in northern Maine because the group sampled was active in senior citizen groups, church groups, and adult education. Sixty-seven and eight-tenths percent of the respondent group was female. It was questionable whether that fact influenced the topic interest responses on the survey. Do females tend to get out more and socialize, for example, participate more in church groups, senior citizen groups, adult education? Would respondents have rated topics more favorably if they were "traditional" female subjects?

Only eighteen and nine-tenths percent of respondents indicated an interest in taking courses during the week-end. The data suggested that the elders surveyed are more willing to attend classes during the day than in the evening. Additionally, forty-three and three-tenths percent of

respondents preferred one-day workshops. The respondents did not indicate interest in the traditional academic semester courses.

Interestingly enough, the highest subject response was trips and hobbies, from the socializing and purposeful living categories of the survey, respectively. These findings were relatively consistent with Craig's (1990) findings, although he found the highest subject responses to be in the area of wills, probates, and trusts. NMTC's service area is predominantly agrarian as was McCook's service area in Craig's study. It can only be speculated as to whether a correlation exists between respondents' subject interest and residence in a farming community. Unlike Craig's findings, this study found respondents to be only moderately interested in the area of wills, probates, and trusts. Perhaps his sample differed significantly in regard to age, which could possibly account for the difference in subject interest.

Eighty-seven and eight-tenths percent of the ninety respondents had lived greater than ten years in NMTC's service area. This provides NMTC with a stable potential mature learner population for which to design relevant programs. Because sixty-seven and eight-tenths percent of respondents cited their reason for continuing their education as self-enrichment, it may well behove NMTC administration to gear mature learner programs toward self-enrichment, rather than academic credit or testing

situations. Also, seventy-five and six-tenths percent of respondents had attended high-school and/or post-secondary school. This suggests that NMTC will not be designing programs for an illiterate group.

The employee needs category of the survey scored the lowest interest and this makes sense since seventy-seven and eight-tenths percent of respondents were retired. The literature suggests that mature learners are most interested in self-enrichment programs (for example, see Craig, 1990), however, others suggest that some elders do go back to school for vocational redirection (for example, see Wolf, 1988). The findings of this study suggest that vocational redirection is not one of the reasons that the older adults surveyed in NMTC's service area desire to continue their education.

Conclusions

Several conclusions can be drawn from both the findings of this study and the literature review. NMTC appears to have a pool of mature adults interested in continuing their education, therefore it can be assumed that there is a need for a mature learner program. The literature indicates that ample revenues and support will have to be committed to the mature learner program. Since a larger proportion of females than males is interested in continuing their education in the fourth quarter of life, perhaps a larger ratio of courses that are of interest to females should be offered.

The older adults surveyed preferred subject areas related to their personal and social needs. Courses in health and health-care, financial management, and hobbies and trips should be the focus of NMTC's mature learner program. Courses that involve employment probably should not be offered as the majority of potential mature learners surveyed were not interested in this area. The older adults surveyed are willing to engage in activities outside of the home from one to three evenings per week. They preferred the one-day workshop course delivery method and they preferred week days to week-ends, thus it would appear that programs should be delivered on week days in the form of all-day workshops.

Findings suggest that an off-campus mature learner program is needed. Areas that are comfortable for elders such as churches, senior citizen groups, and adult education divisions of local high-schools may be the best locations for mature learner programs.

Perhaps the marketing strategy used to target the mature learner cohort should not dwell on credits, testing, pass/fail criteria, or supportive services, but rather on how a course or program will enrich the lives of participants. NMTC's current educational system is inadequate to meet the needs, concerns, and demands of mature adults because the system does not provide courses and programs or delivery methods of interest to mature

adults. NMTC's instructors should be educated to better understand the instructional and program needs of mature learners, as well to understand the developmental needs of these elders.

According to those surveyed, among other reasons older adults return to school is to reorder their lives; to reminisce; to socialize; to learn for the sake of learning; to become self-sufficient; to fulfill personal needs; and to make a contribution to society. It can be concluded from the literature that the older age cohort will continue to grow in the next decade and that colleges will continue to become aware of the needs of this age cohort. Lastly, it can be concluded that the two-year college is the appropriate structure for meeting the continued learning needs of the older population. The two-year college can be an effective vehicle for providing the learning environment older adults need to reorder their lives and to make a contribution to society in the fourth quarter of life.

Implications

It would appear that if NMTC is to offer a program for mature learners, alternative delivery methods will need to be employed. Additionally, instructors will have to be educated about the instructional and program needs of mature learners as well as the developmental needs of this age cohort. The literature does indicate that the learning environment required for mature learners is different from

the learning environment required by younger adults. Workshops, seminars and other educational opportunities should be provided to educators of mature learners. Revenues should be budgeted for the education of educators and for curriculum building efforts. Additionally, administrative support and instructor commitment will be required if a mature learner program is to be designed, adopted, and implemented because change always requires resources and commitment by the major players.

The majority of respondents participated in activities outside of the home from one to three evenings per week; this implies that it is possible to entice mature adults to leave their homes during the evening hours. However, it should be noted that mature adults surveyed indicated the greatest interest in one-day workshops, preferably not on the week-end.

In that sixty-seven and eight-tenths percent of respondents were female, perhaps the survey form should be revised to include topics traditionally thought to be of interest to older females, for example, cake decorating, ballroom dance, flower arrangement, and interior decorating. A repeat survey with the revised questionnaire may show additional interest in expanded topic areas targeted to the older female population.

Because sixty-seven of the ninety respondents did not respond to the question: Are you willing to travel to NMTC

to take courses? - This may imply that courses should be delivered off-campus. An advisory committee might be of benefit to the continuing education department. Mature adults from various walks of life could serve on this committee and advise NMTC administration relative to delivery methods and programs, as well as instructional needs.

Another finding resulting from the literature review is in the area of academic/financial support services. The elderly cohort does not appear to have need, or desire, for supportive services to the degree that the younger age cohort does (Wolf, 1988). The implication is that NMTC need not be overly concerned with supportive services for mature learners.

Additionally, perhaps NMTC should not concern itself with marketing credit courses to mature learners because findings suggested that the mature adults surveyed are interested in continuing their education predominantly for purposes of self-enrichment and secondarily for purposes of socializing. Self-enrichment and social-investment courses such as health and health-care, financial management, and hobbies and trips should be marketed.

NMTC is currently experiencing a severe revenue shortfall, tuition has been increased, and student recruitment has taken on added significance. In that the elderly population in NMTC's service area has increased by

twenty percent in the last decade and the traditional student population has decreased by three percent in the same time period, NMTC cannot afford to ignore the demands and learning needs of the past mid-life cohort.

Recommendations

It is recommended that NMTC's continuing education division organize and promote older adult classes based on the results from this survey and that resources be allocated for systematic program development. Perhaps resources should be targeted for marketing self-enrichment and social-investment courses to older adults in NMTC's service area. It is also recommended that NMTC consider establishing an advisory committee, represented by mature adults, to advise the dean of continuing education relative to instructional and program needs of the past mid-life cohort. Instructional personnel should be educated about the developmental stages and the educational requirements of mature learners. Instructional staff sensitive to older adults should be employed to teach this age cohort.

It is recommended that the questionnaire used in this study be revised to include additional topics of interest to older female adults and a repeat survey be conducted. Additionally, mature adults should be surveyed relative to the locations suitable for delivery of coursework.

It is recommended that additional research pertaining to mature adults be conducted in the areas of classroom environment, preferred educational experiences, interest in support services, learning styles, and delivery methods. Lastly, it is recommended that campus administration use this research report to raise the consciousness of NMTC employees as it relates to the educational needs and desires of mature learners.

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APPENDIX A

SURVEY FORM

GENERAL INFORMATION

Name_____ Date_____.

Gender: Female____ Male____

Age: 55-59____ 60-64____ 65-69____ 70-74____ 75-79____ 80-____

I have lived in this area(year/s): 0-1___ 1-5___ 5-10___ 10-

On the average, the number of evenings per week that I am involved in activities outside the home is:
0___ 1___ 2___ 3___ 4 or more

Highest educational level (check only one):

0-8yrs___ 8-12___ Graduated from high school___ Some college___

College graduate and/or postgraduate training

Employment:

Retired-- No____ Yes____

Working-- No____ Yes____ if yes then Full time____
or part time____

What is/was your primary occupation during your working years?

._____.

Please check the reasons why you would be interested in further learning:
___Prepare for new career ___Earn degree, diploma or certificate
___Upgrade present skills ___Meet new people
___Self-Enrichment

Are you aware that Northern Maine Technical College offers the use of its facilities to qualified companies/organizations for meetings, workshops, seminars, etc. at no cost?
Yes___ No

Questionnaire

Interest inventory to assist in curriculum planning for the Adult Learner at Northern Maine Technical College.

Please circle one response per item: V, I, or N

V - stands for very interested.
I - stands for interested.
N - stands for not interested.

I. What courses related to older adults would you take at Northern Maine Technical College?

A. AREA: Financial Management Skills

1. Pensions, Social Security benefits..... V I N
2. Wills, Probates, and Trusts..... V I N
3. Taxes..... V I N
4. Legal assistance..... V I N
5. Retirement financial planning..... V I N
6. Money management..... V I N
7. Housing choices for retirement..... V I N
8. Consumer problems..... V I N

B. AREA: Employment Needs (to help secure work)

1. Fast food industry..... V I N
2. Clerical/secretarial/computers..... V I N
3. Child day-care services..... V I N
4. In-home care providers for the aged..... V I N
5. Custodial, cleaning services..... V I N
6. Early childhood education (teacher's aids)..... V I N

C. AREA: Health and Health Care

1. Exercise..... V I N
2. Nutrition..... V I N
3. Mental Health education..... V I N
4. Coping with Alzheimers victims..... V I N
5. Medication education..... V I N
6. Selecting and using health care providers..... V I N
7. Coping with living alone..... V I N
8. Support groups for older adults..... V I N
9. Counseling services available for older adults.. V I N
10. Cooking for one person..... V I N

D. AREA: Socializing

1. Trips..... V I N
2. Volunteer work options..... V I N
3. Interpersonal communications skills..... V I N
4. Reading groups..... V I N
5. Performing arts - choir, dance, theater groups.. V I N
6. Forums on political issues and civic concerns... V I N
7. Cards, table-top games..... V I N

E. AREA: Self-Esteem

1. Leadership development skills..... V I N
2. World literature..... V I N
3. American literature..... V I N
4. Sociology courses..... V I N
5. Psychology courses..... V I N

F. AREA: Purposeful Living

1. American history..... V I N
2. American literature..... V I N
3. World history (within your lifetime)..... V I N
4. Creative writing for older adults..... V I N
5. Becoming familiar with the computer..... V I N
6. Painting (watercolor, oil, etc.)..... V I N
7. Understanding new electronic technologies..... V I N
8. Oral history for older adults..... V I N
9. Making material folk crafts..... V I N
10. Day-care provided by older adults..... V I N
11. Hobbies..... V I N
12. Writing your autobiography..... V I N

II. Course Delivery Systems.

A. Live on campus..... V I N
B. Travel to campus..... V I N
C. Attend day classes..... V I N
D. Attend night classes..... V I N
E. Attend traditional semester courses..... V I N
F. Attend mini courses..... V I N
G. Attend weekend (fri. night & sat.) workshops..... V I N
H. Attend one day workshops..... V I N